Not Your Everyday Animals:
Applying Occam's Razor to Cryptozoology

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When looking for scientific explanations for phenomena or occurrences that cannot be explained, one must first consider the simplest explanation possible. That thought process is supported by a law referred to as the Law of Parsimony, or Occam's razor. This is a principle attributed to a Franciscan friar named William of Ockham, who lived in England during the 14th century. The principle itself states that the simplest solution is often the best method for justifying unsupported hypotheses or fallible assumptions (Hiroshi, 1997). Occam's razor is continuously reinvented by scientists, who use the symbolic razor to shave away at the ambiguous metaphysical concepts that either cause confusion or misunderstandings in people. People should apply Occam's razor only at opportune times, because improper usage of the razor could result in the disposal of logical and/or correct hypotheses that appear overly complex.

Cryptozoology, derived from the Greek word *kryptos* (hidden) and the scientific term *zoology*, is the pseudoscience of searching for cryptids, animals with questionable existence. Famous examples of cryptids are bigfoot (sasquatch), chupacabra, kraken, and the Loch Ness Monster. Although numerous self-proclaimed cryptozoologists have published about cryptids, one person stood out as the primary promulgator. Bernard Heuvelmans, a French-Belgian zoologist whose book *On the Track of Unknown Animals* is the first meaningful publications pertaining to cryptozoology, is referred to in literature as the "master of cryptozoology" (Coleman, n.d.). Cryptozoologists are scientists who rely on little to no anecdotal or physical evidence to draw conclusions on a topic. However, these people are not hermit or crank scientists because there are active international organizations to propagate cryptozoology. These organizations are not only collaborative works in the area of cryptozoology, but also places where modern day cryptozoologists work together with zoologists and biologists (who do not necessarily believe in the science) in analyzing field evidence. This collaboration and national outreach is not consistent with Martin Gardner's definition of a hermit or crank scientist (Shermer, 2010).

The primary assumption in cryptozoology is that there are organisms that are still hidden from the public or scientific eye. A large reason for the existence of cryptozoology is to discover and record new, mythical, creatures. Although there are some cryptozoological findings that result from oral tradition, most physical discoveries are made in laboratories. There cryptozoologists spend time analyzing either video evidence or footprint casts to determine the legitimacy of the presented data. Their motivation to discover these purported creatures is so strong that they will create complex, hypothetical situations stating that this alleged creature is alive and researchable. However, they fail to see the crucial details that might negate their findings or contradict their theories. More often than not, the location of the reported discovery is not biologically suitable for sustaining a mythical creature such as a sasquatch or sea monster. Also the lack of recordings from modern tracking equipment (i.e. radar or sonar) shows that these mythological creatures, even those reported to be over 50 feet long, do not appear in their

alleged habitat. Although the assumption that there are undiscovered creatures in the wild is true, the creatures that the cryptozoologists are searching for are ones that require complex explanations that are not parallel with Occam's razor.

Other evidence that cryptozoologists allocate to their assumption making is that their alleged video recordings and eyewitness accounts actually prove the existence of these purported creatures. Their recreation of the eyewitness accounts or video recordings paint a false picture in the heads of others about the existence of cryptids. Cryptozoologists will even go as far as publishing articles on not only public webpages, but also in forums and journals focused on exotic zoology and cryptozoology. Once this ostensible evidence is made public it will become undermined by public scrutiny, and eventually it will be disproved by a professional scientist as a misinterpretation or CGI (Computer Generated Images). Misidentification is most common with the more well-known cryptoids such as sasquatch, sea serpents, and chupacabra. This assumes for the existence of a cryptid with zero concrete evidence logged about it, and therefore is rejected by most people in society as both false and absurd. Most of the explanations offered to the public by cryptozoologists are meticulously thought about for countless hours. They will always go along with the firm belief that this new cryptid is legitimate and researchable (Roesch, 1999). Because of the absence of tangible evidence pertaining to cryptids and the irresolute assumptions reported by cryptozoologists, Occam's razor can simplify the explanation of these cryptid sightings to either the misidentification of an organism or the generation of a computer image.

When examined using Occam's razor, cryptozoology does not fare well as a legitimate science. Cryptozoologists do not consider the simplest explanation first while looking for explanations to purported cryptozoological phenomena. They always jump to the conclusion that it is a new mythical creature inhabiting a certain location. They do not contemplate the idea that this evidence is possibly CGI or misidentification, as these possibilities serve as the simplest explanation. The evidence that they receive shouldn't ever be taken in abstract directions from the beginning because it doesn't make scientific sense. There are currently too many complex theories about cryptids and their behavioral patterns to match the simplicity needed to satisfy the requirements of Occam's razor. Therefore, cryptozoology is not actually a science at all, and should be considered merely a pseudoscience.

Literature Cited

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